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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,452

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Olivier Bremond

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EXAMINER

WALSH, DANIEL I

ART UNIT

PAPER NUMBER

2887

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/519,452	BREMOND ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DANIEL WALSH	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19-25 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-25 and 28-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2-19-10</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 19-22, 25, and 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara (JP04078551A) in view of Berson (US 5,861,618).

Re claim 19, Fujiwara teaches a method for marking an item comprising the steps of providing information to be applied to an item (in storage device 2), applying a first marking to the item corresponding to the information (barcode printed by printing device 3), reading the marking and comparing it with the information (abstract) and if the information does not correspond, applying a second marking to the item (error mark).

Art Unit: 2887

Fujiwara is silent to the first marking being using an ink comprising a material based security element selected from the group consisting of luminescent materials, UV absorbers and IR absorbers, which specific nature and proportion allows materially authenticating the marked item by detecting a characteristic proper of its emission and/or absorption spectrum.

Berson teaches using invisible inks for printing barcodes (col 1, lines 50+). Re the limitation that the first marking is printed using an ink comprising a material based security element selected from the group consisting of luminescent materials and UV/IR absorbers, the Examiner notes that the material of invisible ink can be interpreted as a material based security element because it is invisible, and as a fluorescent ink, it is interpreted as luminescent (with proper illumination). Re the newly added limitation that the specific nature and proportion allows materially authenticating the item by detecting a characteristic property of its emission/absorption spectrum, the Examiner notes an emission spectrum is broadly interpreted as intensity of radiation at frequencies when the material based security element is excited. Therefore, as the invisible ink is interpreted to have an emission spectrum (certain wavelengths of excitation result in a visible effect), the Examiner notes that such detecting (seeing) this property of the emission spectrum is broadly interpreted as allowing for authentication of the marked item, as the code allowed to be read/visible/authenticated.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujiwara with those of Berson

One would have been motivated to do this for security or to have more area for additional information.

Art Unit: 2887

Re claim 20, though silent to being carried out in-line on integrated equipment under control of an electronic processor, the Examiner notes that FIG. 1 appears to show in line, and control device 1 can be interpreted as a processor.

Re claim 21, the error marker 9 is interpreted as a cancellation mark printed on the label.

Re claim 22, both markings are printed.

Re claim 25, a barcode has been discussed above.

Re claim 28, the barcode contains information that is put into code/encoded (barcode) and hence is interpreted as encrypted information. Alternatively, the Examiner notes that an encrypted barcode (via encryption technology) is an obvious expedient for security.

Re claim 29, though silent to photocells/camera coupled to image processing means, the Examiner notes that it is well know and conventional to use such reading means to read barcodes, to provide the reduce cost/complexity over laser readers, for example.

Re claim 30, though silent to the information being generated on a remote server/locally (where information is generated), the Examiner notes it would have been obvious to one of ordinary skill in the art to have the information generated at a central/shared server in order for data to be easily shared/updated across systems, as is known in the art, to provide for easy updating while also reducing the complexity of the local devices.. The Examiner notes that the information could be generated either remotely, or locally. One might desire to have it generated locally to have a stand alone unit, or to have dedicated storage locally, or remotely, as discussed above. The Examiner believes that it would have been obvious to one of ordinary skill in the art to have the information generated remotely and then communicated, for the expected results of less complexity of the local device, and the ability to share, for example. Further, the device

Art Unit: 2887

would appear to perform its tasks of verifying printed barcodes regardless of whether the code is generated locally and stored in memory or generated remotely and stored in memory or remotely communicated. These are expected results common to sharing data from a central/remote server across devices, and therefore an obvious expedient, whether the data/information being shared is barcode data, pricing data, images, etc; sharing of data across a network, and its benefits are known in the art. The Examiner further notes that the claim does not recite authentication, but merely allowing for authentication, so authentication itself is not positively recited, and therefore the prior art is believed to allow for authentication.

Re claims 31-32, though silent to the error marker being an ink jet printer, as an error mark is printed, it is understood to be marked by a printer. The selection of a known/conventional type of printer is an obvious expedient for expected results such as low cost, non-contact, readily acceptable, etc.

Re claim 33, though silent to being printed with a particular color, the Examiner notes that the selection of a particular color is an obvious matter of design variation, motivated by contrast, for example. Selection of a particular color is within the ordinary skill in the art.

Re claim 34, a barcode (machine readable component) has been discussed above.

Re claim 35, though silent to putting the barcode on an article or good, the Examiner notes it would have been obvious to one of ordinary skill in the art to apply a barcode to an item or article for information purposes, as is conventional in the art. Further, the Examiner notes that the roll of labels can be interpreted as the label (item) being attached to an article/good (the backing the label is removably attached to).

Re claims 36-37, the limitations have been discussed above re claims 19-20.

Art Unit: 2887

4. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara/Berson, as discussed above, in view of Lubow (US 20030080191).

Re claims 23, 24, and 27, the teachings of Fujiwara/Berson have been discussed above.

Fujiwara is silent to ink-jet printing/laser marking on a light or heat sensitive coating.

Lubow et al. teaches such limitations (paragraph [0011]). The item is interpreted as light/heat sensitive, as known in the art.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujiwara/Berson with those of Lubow et al.

One would have been motivated to do this to provide a cost effective and reliable means to print, without contact, as conventional in the art.

5. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara/Berson, as discussed above, in view of Genji (JP 02202465).

The teachings of Fujiwara/Berson have been discussed above.

Fujiwara/Berson are silent to a quality control detector unit.

Genji teaches a quality control detector (Constitution) as Genji is a self-correcting printing/verifying device which prints a barcode on a sheet, scans and reads the mark, calculates deviation between dimensions of some portions of the read mark with specific dimensions and then changes printing drive signals to decrease the deviation, thereby being interpreted as a quality control detector unit.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujiwara/Berson with those of Genji.

Art Unit: 2887

One would have been motivated to do this to self correct (accuracy) while having high throughput.

6. Claims 19-22, 25, and 28-37 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara (JP04078551A) in view of Auslander (US 6905538).

The teachings of Fujiwara have been discussed above.

Fujiwara is silent to the first marking being using an ink comprising a material based security element selected from the group consisting of luminescent materials, UV absorbers and IR absorbers, which specific nature and proportion allows materially authenticating the marked item by detecting a characteristic proper of its emission and/or absorption spectrum.

Auslander teaches such limitations (abstract), and that authentication is enabled (paragraph [0036], corresponding to col 4, lines 40+ which teach fluorescence and authentication). The Examiner notes that the material of invisible ink can be interpreted as a material based security element because it is invisible, and as a fluorescent ink, it is interpreted as luminescent (with proper illumination). Further, the invisible ink is interpreted to have an emission spectrum (certain wavelengths of excitation result in a visible effect), the Examiner notes that such detecting (seeing) this property of the emission spectrum is broadly interpreted as allowing for authentication of the marked item. The Examiner also notes that claim 16 teaches authentication, as well.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujiwara with those of Auslander.

One would have been motivated to do this for security or to have more area for additional information.



Art Unit: 2887

Re claim 20, though silent to being carried out in-line on integrated equipment under control of an electronic processor, the Examiner notes that FIG. 1 appears to show in line, and control device 1 can be interpreted as a processor.

Re claim 21, the error marker 9 is interpreted as a cancellation mark printed on the label.

Re claim 22, both markings are printed.

Re claim 25, a barcode has been discussed above.

Re claim 28, the barcode contains information that is put into code/encoded (barcode) and hence is interpreted as encrypted information. Alternatively, the Examiner notes that an encrypted barcode (via encryption technology) is an obvious expedient for security.

Re claim 29, though silent to photocells/camera coupled to image processing means, the Examiner notes that it is well know and conventional to use such reading means to read barcodes, to provide the reduce cost/complexity over laser readers, for example.

Re claim 30, though silent to the information being generated on a remote server/locally (where information is generated), the Examiner notes it would have been obvious to one of ordinary skill in the art to have the information generated at a central/shared server in order for data to be easily shared/updated across systems, as is known in the art, to provide for easy updating while also reducing the complexity of the local devices.. The Examiner notes that the information could be generated either remotely, or locally. One might desire to have it generated locally to have a stand alone unit, or to have dedicated storage locally, or remotely, as discussed above. The Examiner believes that it would have been obvious to one of ordinary skill in the art to have the information generated remotely and then communicated, for the expected results of less complexity of the local device, and the ability to share, for example. Further, the device

Art Unit: 2887

would appear to perform its tasks of verifying printed barcodes regardless of whether the code is generated locally and stored in memory or generated remotely and stored in memory or remotely communicated. These are expected results common to sharing data from a central/remote server across devices, and therefore an obvious expedient, whether the data/information being shared is barcode data, pricing data, images, etc; sharing of data across a network, and its benefits are known in the art.

Re claims 31-32, ink jet printing is taught by Auslander (abstract) as an obvious expedient for low cost and quick printing.

Re claim 33, though silent to being printed with a particular color, the Examiner notes that the selection of a particular color is an obvious matter of design variation, motivated by contrast, for example. Selection of a particular color is within the ordinary skill in the art.

Re claim 34, a barcode (machine readable component) has been discussed above.

Re claim 35, though silent to putting the barcode on an article or good, the Examiner notes it would have been obvious to one of ordinary skill in the art to apply a barcode to an item or article for information purposes, as is conventional in the art. Further, the Examiner notes that the roll of labels can be interpreted as the label (item) being attached to an article/good (the backing the label is removably attached to).

Re claims 36-37, the limitations have been discussed above re claims 19-20.

7. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara/Auslander, as discussed above, in view of Genji (JP 02202465).

The teachings of Fujiwara/Auslander have been discussed above.

Fujiwara/Auslander are silent to a quality control detector unit.

Art Unit: 2887

Genji teaches a quality control detector (Constitution) as Genji is a self-correcting printing/verifying device which prints a barcode on a sheet, scans and reads the mark, calculates deviation between dimensions of some portions of the read mark with specific dimensions and then changes printing drive signals to decrease the deviation, thereby being interpreted as a quality control detector unit.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujiwara/Auslander with those of Genji..

One would have been motivated to do this to self correct (accuracy) while having high throughput.

### ***Response to Arguments***

8. Applicant's arguments filed 7-31-09 have been fully considered but they are not persuasive. The art of Benson is interpreted to teach luminescent ink (security) as discussed above, which has a property in that its emission spectrum results in visibility when excited at a certain wavelength, such a property allowing authentication

9. Further, the Examiner notes that the claims do not recite the details of the authentication, or even how authentication is performed, as authentication is not positively recited. Therefore, one can broadly interpret "allowing materially authenticating" to mean that such an emission spectrum property allows for authentication/verification/validation of the material/item.

Allowing authentication could include allowing visibility of the invisible ink, reading of the code, etc.

Art Unit: 2887

10. In response to the Applicants argument that Berson does not disclose any such material-based security element, the Examiner disagrees. Claim 1 of the current application recites a material based security element... whose specific nature and proportion allows materially authenticating the marked item by detecting a characteristic property of its emission and/or absorption spectra. The Examiner notes that the invisible ink is interpreted as a material for security and therefore is a material based security element (col 1, line 53, difficulty for counterfeiting). The specific nature and proportion of the invisible ink allows materially authenticating the item by detecting a characteristic property of its emission spectra, because the specific nature and amount (visible when activated) allows the item to be authenticated because its emission spectra is read, and therefore, since the information can be read, the item is authenticated in such a manner.

11. The Examiner notes that as no argument has been supplied for the rejection of claims using the Auslander reference, and therefore the Examiner maintains the rejection, and also notes the explanation about material for security and authentication, as discussed above, re Berson.

#### ***Additional Remarks***

10. The Examiner notes that US 20010014169 teaches authentication via UV/IR sensitive materials, US 20030177941 teaches security mark authentication, US 20040123771 teaches inkjet printing of barcode images with water based invisible inks having defined excitation and emission spectra, US 4146792 teaches security features that fluoresce in the visible, UV, or IR spectral range in characteristic emission spectra which permit identification of these substances, US 4175776 teaches marking with characteristic absorption spectra for

Art Unit: 2887

identification/authentication, US 4736425 teaches authentication via fluorescence in the material, and US 6246061 teaches a marking dye which emits in the IR portion of the spectrum for authentication.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See PTO-892), especially noting Oshino et al. (US 2004/0057768) which appears analogous art.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL WALSH whose telephone number is (571)272-2409. The examiner can normally be reached on M-F 9am-7pm.

Art Unit: 2887

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Paik can be reached on 571-272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANIEL WALSH/  
Primary Examiner, Art Unit 2887